

10/817,443

(FILE 'HOME' ENTERED AT 15:54:11 ON 21 JUN 2005)

FILE 'REGISTRY' ENTERED AT 15:55:19 ON 21 JUN 2005

L1 STRUCTURE UPLOADED  
L2 0 S L1  
L3 STRUCTURE UPLOADED  
L4 0 S L3  
L5 0 S L3 FULL  
L6 STRUCTURE UPLOADED

=> d l6

L6 HAS NO ANSWERS

L6 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s l6

SAMPLE SEARCH INITIATED 16:03:22 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 11736 TO ITERATE

8.5% PROCESSED 1000 ITERATIONS 0 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 228230 TO 241210

PROJECTED ANSWERS: 0 TO 0

L7 0 SEA SSS SAM L6

=> s l6 full

FULL SEARCH INITIATED 16:03:28 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 232939 TO ITERATE

100.0% PROCESSED 232939 ITERATIONS 2 ANSWERS  
SEARCH TIME: 00.00.01

L8 2 SEA SSS FUL L6

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

327.82

328.24

FILE 'CAPLUS' ENTERED AT 16:03:36 ON 21 JUN 2005

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FILE LAST UPDATED: 20 Jun 2005 (20050620/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

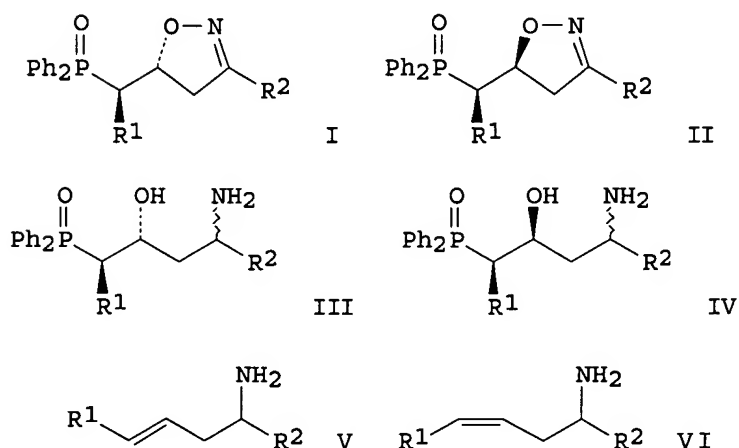
=> s 18

L9 2 L8

=> d 1-2 bib abs

L9 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1998:48613 CAPLUS  
DN 128:140769  
TI Regioselectivity in the C-alkylation of triethyl 3-methyl-4-phosphonobut-2-enoate  
AU Kryshnal, G. V.; Zhdankina, G. M.; Serebryakov, E. P.  
CS N. D. Zelinsky Inst. Organic Chem., Russian Academy Sciences, Moscow, 117913, Russia  
SO Russian Chemical Bulletin (Translation of Izvestiya Akademii Nauk, Seriya Khimicheskaya) (1997), 46(10), 1745-1750  
CODEN: RCBUEY; ISSN: 1066-5285  
PB Consultants Bureau  
DT Journal  
LA English  
AB The reaction of tri-Et 3-methyl-4-phosphonobut-2-enoate (1) with three alkyl halides, RX (R = Pri, Me2CHCH2CH2, and c-C5H9; X = Br, I) in the system KOH(solid)-DMF-Bu4NBr at -20° gives exclusively products of alkylation at C(2) with Δ2 and/or Δ3 position of the double bond. Under the same conditions, the reaction of 1 with MeI gives a mixture of products with different substitution patterns. Only the use of an ion pair extraction technique affords 2-methyl-Δ2-products selectively, albeit in rather moderate yields. The Horner-Emmons olefination of PhCHO with the resulting phosphonates gives Et 2-alkyl-3-methyl-5-phenylpenta-2,4-dienoates in high yields.  
RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1994:133786 CAPLUS  
DN 120:133786  
TI A new method for stereoselective homoallylic amine synthesis  
AU Armstrong, Susan K.; Collington, Eric W.; Knight, Julian G.; Naylor, Alan; Warren, Stuart  
CS Univ. Chem. Lab., Cambridge, CB2 1EW, UK  
SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1993), (13), 1433-47  
CODEN: JCPRB4; ISSN: 0300-922X  
DT Journal  
LA English  
OS CASREACT 120:133786  
GI



AB Nitrile oxide cycloaddns. to readily available allylic diphenylphosphine oxides [ $\text{Ph}_2\text{P}(\text{O})\text{CHR}_1\text{CH}:\text{CH}_2$ ;  $\text{R}_1 = \text{H, Me, Et, Pr, isobutyl}$ ] proceeded regioselectively and stereoselectively to give 5-(1'-diphenylphosphinoyalkyl)isoxazolines [I and II;  $\text{R}_1$  as above,  $\text{R}_2 = \text{Et, Pr, hexyl, Ph, Me, CO}_2\text{Et, (CH}_2)_n\text{CO}_2\text{Me, } n = 2,3$ ]. These heterocycles were reduced to  $\delta$ -amino- $\beta$ -hydroxyalkyldiphenylphosphine oxides (III and IV;  $\text{R}_1, \text{R}_2$  as above) using a combination of sodium borohydride and nickel(II) chloride. Stereospecific elimination of diphenylphosphinic acid from the reduction products using sodium hydride in N,N-dimethylformamide gave homoallylic primary amines (V and VI;  $\text{R}_1, \text{R}_2$  as above) of defined stereochem.

